# The Forests of Washington and Oregon in the 1930s


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## INTRODUCTION

In the 1930s the Pacific Northwest Experiment Station:

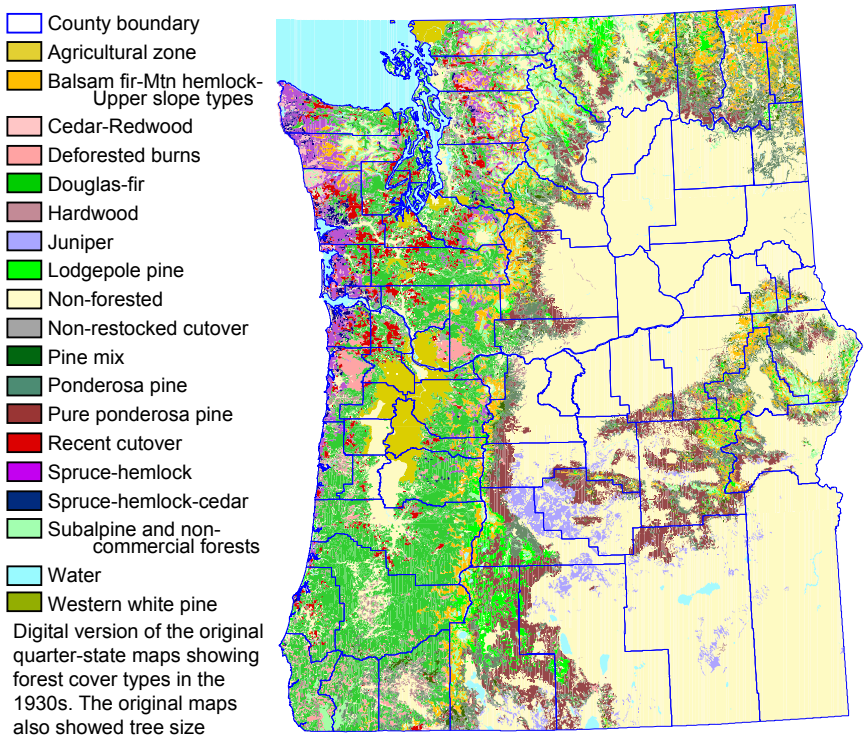
- Surveyed all forests in Washington and Oregon,
- Prepared maps of forest species composition and tree size

These maps have been digitized and are now available. The maps can be used to obtain an overview of what the forest cover was at that time and to compare current forest cover with that which existed 70 years ago.

## BACKGROUND

The 1930s forest survey of Washington and Oregon was the largest, most complete survey to date. The survey used a combination of on-the-ground surveys, aerial photography, and existing surveys (adjusted after field checks to ensure consistency) to cover all forest lands in both states.

The Douglas-fir region (western Washington and Oregon) was surveyed first, and the ponderosa pine region (eastern Washington and Oregon) was surveyed 2 years later. County maps were prepared as each county survey was completed, then "quarter-state" maps (one map for each quarter of the 2 states) were issued. The quarter-state maps (1:253,440) provide information on forest species composition and tree size as well as identifying areas that had been recently burned or cutover.




Digital version of the original quarter-state maps showing forest cover types in the 1930s. The original maps also showed tree size classes and that information is preserved in the digital version.

## AVAILABLE PRODUCTS

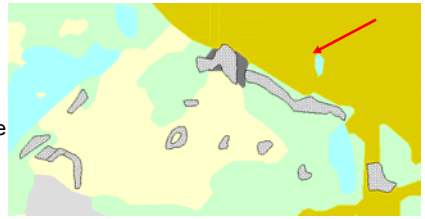
A history of the survey, along with reprinted copies of the original publications reporting results from the survey is being printed. A companion CD includes GIS and graphics files showing the composite map developed from the 8 quarter-state maps as well as PDF files of the history and original publications.

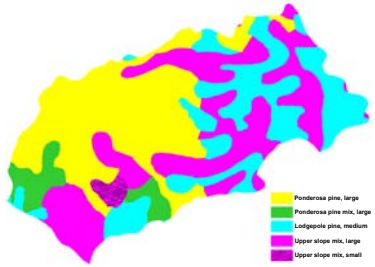
## COUNTY MAPPING

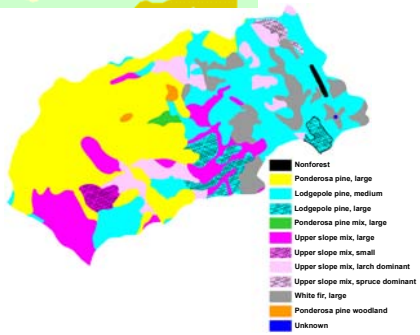
County-level maps were produced at a scale of 1:63,360. This map scale allowed more detail to be included.

The county-level maps are especially valuable for fine-scale analyses because the tree species and size information is mapped at a finer scale and these maps also include more detailed information about certain disturbance factors such as fire.

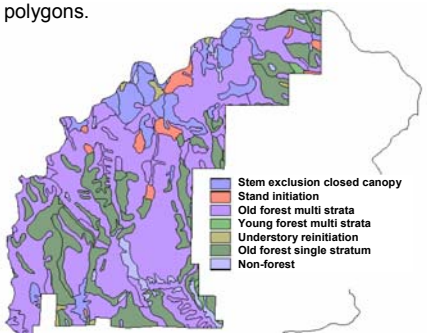
This portion of the **quarter-state** map for Pierce County, Washington shows the mapped polygons with solid colors. Only one area (see arrow) was mapped as Oregon white oak. Ten additional areas (shown as speckled) were mapped as oak on the **county** map for Pierce County.



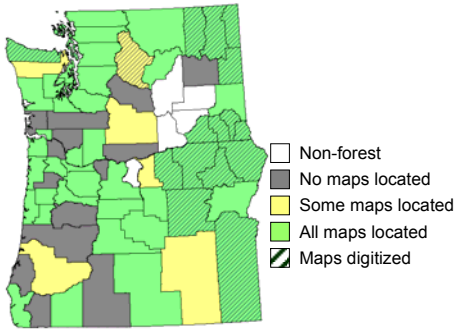




Forest cover maps of the Kelsay Creek watershed on the Umatilla National Forest in eastern Oregon – the view on the left is based on the quarter-state map, the view on the right is based on the county map. Both maps indicate the watershed was dominated by stands of large ponderosa pine and medium lodgepole pine, but the county map has twice as many forest types mapped as well as providing finer detail on the outline of the forest cover polygons.




**Use of forest cover and size class information**

The quarter-state maps divided forest cover for the major species into 2 to 4 size classes. The county maps also provided information on 10-year age classes (for stands < 20 – 24") and 3 stocking classes. This information can be used to determine the historical (1930) distribution of stand structure classes.




**Status of county maps**

County maps have been located for almost 2/3 of the counties and several are available digitally. Please contact charrington@fs.fed.us or dweyerman@fs.fed.us if you have information on any of the missing maps or digital versions of county maps you would be willing to share.